

# **Honolulu High-Capacity Transit Corridor Project**

## **Locally-Preferred Alternative Report**

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City and County of Honolulu

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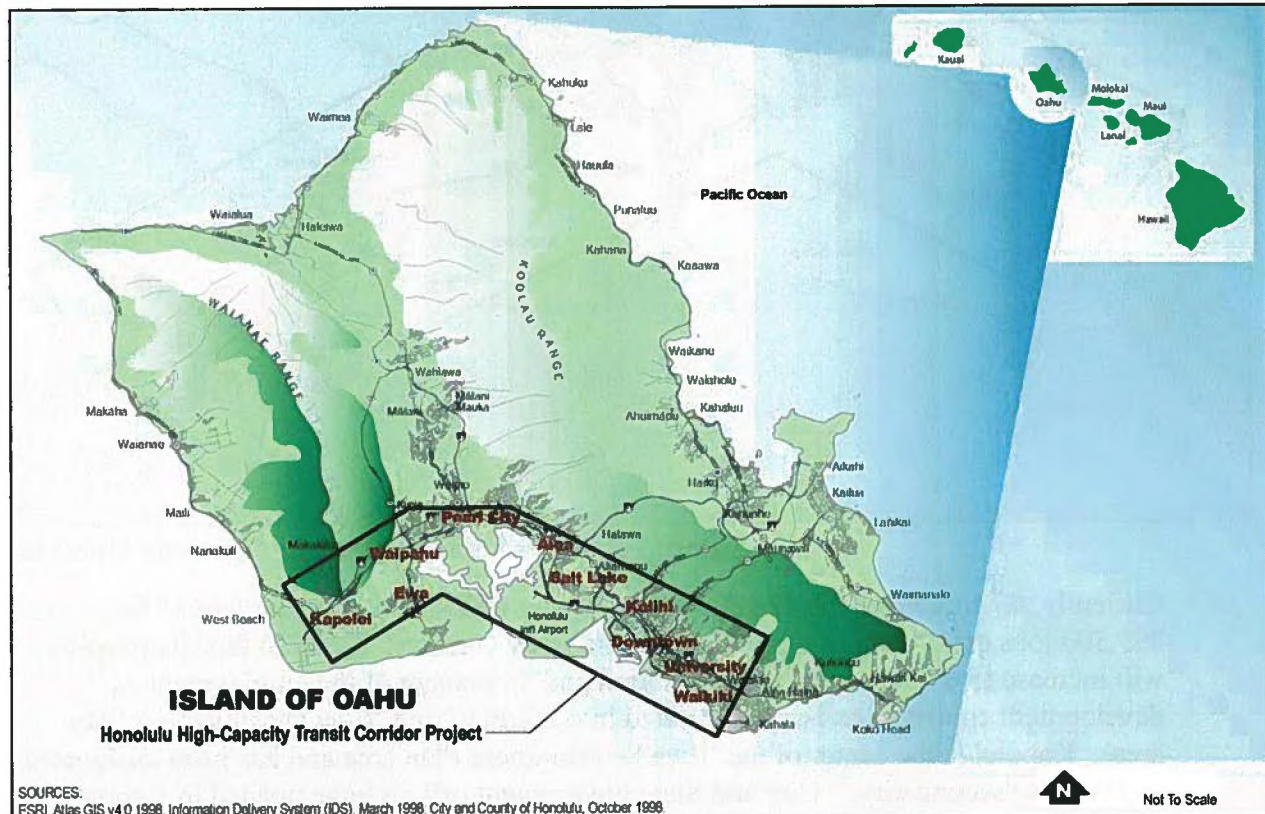
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The City and County of Honolulu Department of Transportation Services (DTS), in coordination with the U.S. Department of Transportation Federal Transit Administration (FTA), has carried out an Alternatives Analysis (AA) to evaluate alternatives that would provide high-capacity transit service on O‘ahu. The primary project study area is the travel corridor between Kapolei and the University of Hawai‘i at Mānoa (UH Mānoa) (Figure 1-1). This corridor includes the majority of housing and employment on O‘ahu. The east-west length of the corridor is approximately 23 miles. The north-south width of the corridor is at most four miles, as much of the corridor is bounded by the Ko‘olau and Wai‘anae Mountain Ranges to the north and the Pacific Ocean to the south.



**Figure 1-1: Project Vicinity**

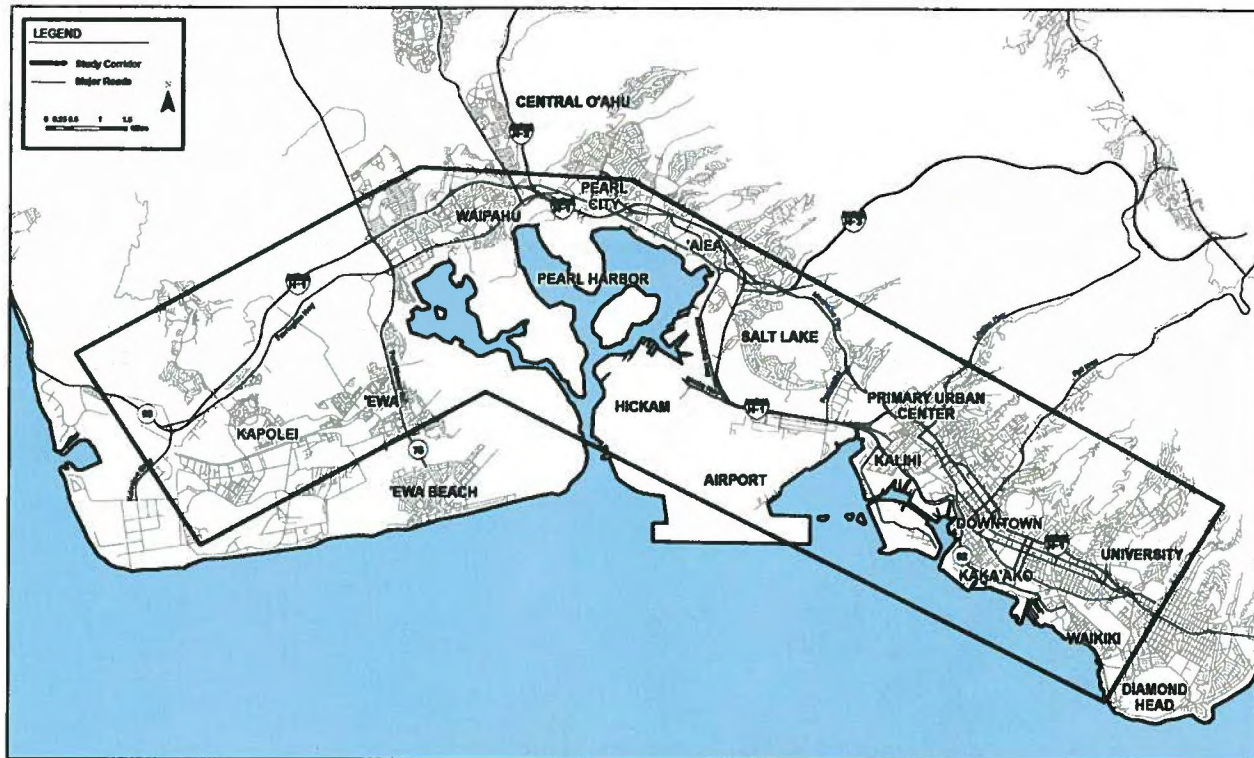
## Project Description

### *Description of the Study Corridor*

The study corridor extends from Kapolei in the west (Wai‘anae or ‘Ewa direction) to the University of Hawai‘i at Mānoa (UH Mānoa) in the east (Koko Head direction), and is confined by the Wai‘anae and Ko‘olau Mountain Ranges to the north (mauka direction) and the Pacific Ocean to the south (makai direction). Between Pearl City and ‘Aiea, the corridor’s width is less than one mile between the Pacific Ocean and the base of the Ko‘olau Mountains.



The General Plan for the City and County of Honolulu directs future population and employment growth to the 'Ewa and Primary Urban Center (PUC) Development Plan areas and the Central O'ahu Sustainable Communities Plan area. The largest increases in population and employment are projected in the 'Ewa, Waipahu, Downtown, and Kaka'ako districts, which are all located in the corridor (Figure 1-2).



**Figure 1-2: Areas and Districts in the Study Corridor**

Currently, 63 percent of the 876,200 people living on O'ahu and 81 percent of the 499,300 jobs on O'ahu are located within the study corridor. By 2030 this distribution will increase to 69 percent of the population and 84 percent of the employment as development continues to be concentrated into the PUC and 'Ewa Development Plan areas. Kapolei is the center of the 'Ewa Development Plan area and has been designated as O'ahu's "second city." City and State government offices have opened in Kapolei, and the University of Hawai'i is developing a master plan for a new West O'ahu campus there. The Kalaeloa Community Development District (formerly known as Barbers Point Naval Air Station) covers 3,700 acres adjacent to Kapolei and is planned for redevelopment. The Department of Hawaiian Home Lands is also a major landowner in the area and is planning for residential and retail development. In addition, developers have several proposals to continue the construction of residential subdivisions.

Continuing Koko Head, the corridor follows Farrington and Kamehameha Highways through a mixture of low-density commercial and residential development. This part of the corridor passes through the makai portion of the Central O'ahu Sustainable Communities Plan area.



Farther Koko Head, the corridor enters the PUC Development Plan area, which is bounded by commercial and residential densities that begin to increase in the vicinity of Aloha Stadium. The Pearl Harbor Naval Reserve, Hickam Air Force Base, and Honolulu International Airport border the corridor on the makai side. Military and civilian housing are the dominant land uses mauka of Interstate Route H-1 (H-1 Freeway), with a concentration of high-density housing along Salt Lake Boulevard.

As the corridor continues Koko Head across Moanalua Stream, the land use becomes increasingly dense. Industrial and port land uses dominate along the harbor, shifting to primarily commercial uses along Dillingham Boulevard, a mixture of residential and commercial uses along North King Street, and primarily residential use mauka of the H-1 Freeway.

Koko Head of Nu‘uanu Stream, the corridor continues through Chinatown and Downtown. The Chinatown and Downtown areas, with 62,300 jobs, have the highest employment density in the corridor. The Kaka‘ako and Ala Moana neighborhoods, comprised historically of low-rise industrial and commercial uses, are being revitalized with several high-rise residential towers currently under construction. Ala Moana Center, both a major transit hub and shopping destination, is served by more than 2,000 weekday bus trips and visited by more than 56 million shoppers annually.

The corridor continues to Waikīkī and through the McCully neighborhood to UH Mānoa. Today, Waikīkī has more than 20,000 residents and provides more than 44,000 jobs. It is one of the densest tourist areas in the world, serving approximately 72,000 visitors daily (DBEDT, 2003). UH Mānoa is the other major destination at the Koko Head end of the corridor. It has an enrollment of more than 20,000 students and approximately 6,000 staff (UH, 2005). Approximately 60 percent of students do not live within walking distance of campus (UH, 2002) and must travel by vehicle or transit to attend classes.

### ***Alternatives Considered***

Four alternatives were evaluated in the *Alternatives Analysis Report* (AA). They were developed through a screening process that considered alternatives identified through previous transit studies, a field review of the study corridor, an analysis of current housing and employment data for the corridor, a literature review of technology modes, work completed by the O‘ahu Metropolitan Planning Organization (OMPO) for its Draft 2030 Regional Transportation Plan, and public and agency comments received during a formal project scoping process held in accordance with requirements of the National Environmental Policy Act (NEPA) and the Hawai‘i EIS Law (Chapter 343, Hawai‘i Revised Statutes). The four alternatives are described in detail in the *Honolulu High-Capacity Transit Corridor Project Alternatives Analysis Definition of Alternatives Report* (DTS, 2006a). The alternatives identified for evaluation in the AA report are as follows:

- No Build Alternative
- Transportation System Management Alternative
- Managed Lane Alternative
- Fixed Guideway Alternative



### **Alternative 1: No Build**

The No Build Alternative includes existing transit and highway facilities and committed transportation projects anticipated to be operational by 2030. Committed transportation projects are those programmed in the O‘ahu 2030 Regional Transportation Plan prepared by OMPO. The committed highway elements of the No Build Alternative were also included in the AA build alternatives (discussed below).

The No Build Alternative’s transit component would include an increase in fleet size to accommodate growth in population, while allowing service frequencies to remain the same as today. The number of buses, as well as required ancillary facilities, was estimated during the preparation of the AA.

### **Alternative 2: Transportation System Management**

The Transportation System Management (TSM) Alternative would provide an enhanced bus system based on a hub-and-spoke route network and relatively low-cost capital improvements on selected roadway facilities to give priority to buses. The TSM Alternative would include the same committed highway projects as assumed for the No Build Alternative.

### **Alternative 3: Managed Lane**

The Managed Lane Alternative would include construction of a two-lane, grade-separated facility between Waipahu and Downtown Honolulu for use by buses, paratransit vehicles, and vanpool vehicles. High-occupancy vehicles (HOV) and toll-paying, single-occupant vehicles also would be allowed to use the facility provided that sufficient capacity would be available to maintain free-flow speeds for buses and the above-noted paratransit and vanpool vehicles. Variable pricing strategies for single-occupant vehicles would be implemented to ensure free-flow speeds for high-occupancy vehicles.

Intermediate bus access points would be provided in the vicinity of Aloha Stadium and Middle Street. Buses using the managed lane facility would be restructured and enhanced, providing additional service between Kapolei and other points ‘Ewa of the PUC, as well as Downtown Honolulu and UH Mānoa.

### **Alternative 4: Fixed Guideway**

The Fixed Guideway Alternative would include the construction and operation of a fixed-guideway transit system between Kapolei and UH Mānoa. The system could use any fixed-guideway transit technology approved by FTA and meeting performance requirements, and could be automated or employ drivers.

Station and supporting facility locations are currently being identified and would include a vehicle maintenance facility and park-and-ride lots. Bus service would be reconfigured to bring riders on local buses to nearby fixed-guideway transit stations.

Although this alternative would be designed to be within existing street or highway rights-of-way as much as possible, property acquisition at various locations is expected to



be necessary. Future extensions of the system to Central O‘ahu, East Honolulu, or within the corridor are possible, but are not being addressed in detail at present.

A broad range of modal technologies was considered for application to the Fixed Guideway Alternative, including light rail transit, personal rapid transit, automated people mover, monorail, magnetic levitation (maglev), commuter rail, and emerging technologies still in the developmental stage. Several technologies were selected in an earlier screening process and will be considered as possible options for the fixed-guideway technology. Technologies that were not carried forward from the screening process include personal rapid transit, commuter rail, and the emerging technologies. The screening process is documented in the *Honolulu High-Capacity Transit Corridor Project Screening Report* (DTS, 2006b).

The study corridor for the Fixed Guideway Alternative was evaluated in five sections to simplify analysis and impact evaluation in the AA process and report. In general, each alignment under consideration within each of the five sections may be combined with any alignment in the adjacent sections.

Each alignment has distinctive characteristics and environmental impacts and provides different service options. Therefore, each alignment was evaluated individually and compared to the other alignments in each section. The sections that were evaluated and the alignments evaluated for each section are listed in Table 1-1. In addition to the combinations of alignments, a shorter 20-mile Alignment also was evaluated.

**Table 1-1: Fixed Guideway Alternative Analysis Sections and Alignments**

| Section                                      | Alignments Considered   |
|--|---|
| <b>I. Kapolei to Fort Weaver Road</b>        | Kamokila Boulevard/Farrington Highway   |
|  | Kapolei Parkway/North-South Road  |
|  | Saratoga Avenue/North-South Road  |
|  | Geiger Road/Fort Weaver Road  |
| <b>II. Fort Weaver Road to Aloha Stadium</b> | Farrington Highway/Kamehameha Highway   |
| <b>III. Aloha Stadium to Middle Street</b>   | Salt Lake Boulevard   |
|  | Makai of the Airport Viaduct  |
|  | Mauka of the Airport Viaduct  |
|  | Aolele Street   |
| <b>IV. Middle Street to Iwilei</b>           | North King Street   |
|  | Dillingham Boulevard  |
| <b>V. Iwilei to UH Mānoa</b>                 | Hotel Street/Kawaiaha'o Street/Kapi'olani Boulevard with or without Waikīkī Branch    |
|  | Hotel Street/Waimanu Street/Kapi'olani Boulevard with or without Waikīkī Branch       |
|  | Nimitz Highway/Queen Street/Kapi'olani Boulevard with or without Waikīkī Branch       |
|  | Nimitz Highway/Halekauwila Street/Kapi'olani Boulevard with or without Waikīkī Branch |
|  | Beretania Street/South King Street  |
|  | Waikīkī Branch  |



## Project Purpose

The purpose of the Honolulu High-Capacity Transit Corridor Project is to provide improved mobility for persons traveling in the highly congested east-west transportation corridor between Kapolei and UH Mānoa, confined by the Waiʻanae and Koʻolau Mountain Ranges to the north and the Pacific Ocean to the south. The project would provide faster, more reliable public transportation services in the corridor than those currently operating in mixed-flow traffic. The project would also provide an alternative to private automobile travel and improve linkages between Kapolei, the urban core, UH Mānoa, Waikīkī, and urban areas in-between. Implementation of the project, in conjunction with other improvements included in the 2030 Oʻahu Regional Transportation Plan (ORTP), would moderate anticipated traffic congestion in the corridor. The project also supports the goals of the Oʻahu General Plan and the ORTP by serving areas designated for urban growth.

## Project Area Needs

### ***Improved Mobility for Travelers Facing Increasingly Severe Traffic Congestion***

The existing transportation infrastructure in the corridor between Kapolei and UH Mānoa is overburdened handling current levels of travel demand. Motorists experience substantial traffic congestion and delay at most times of the day during both the weekdays and weekends. Average weekday peak-period speeds on the H-1 Freeway are currently less than 20 miles per hour (mph) in many places and will degrade even further by 2030. Transit vehicles are caught in the same congestion. Travelers on Oʻahu's roadways currently experience 51,000 vehicle hours of delay, a measure of how much time is lost daily by travelers stuck in traffic, on a typical weekday. This is projected to increase to more than 71,000 daily vehicle hours of delay by 2030, assuming implementation of all of the planned improvements listed in the ORTP (except for a fixed guideway system). Without these improvements, the ORTP indicates that daily vehicle-hours of delay could increase to as much as 326,000 vehicle hours.

Current a.m. peak-period travel times for motorists from West Oʻahu to Downtown average between 45 and 81 minutes. By 2030, after including all of the planned roadway improvements in the ORTP, this travel time is projected to increase to between 53 and 83 minutes. Average bus speeds in the system have been decreasing steadily as congestion has increased. Currently, express bus travel times from ʻEwa Beach to Downtown range from 45 to 76 minutes and local bus travel times from ʻEwa Beach to Downtown range from 65 to 110 minutes during the peak period. By 2030, these travel times are projected to increase by 20 percent on an average weekday. Within the urban core, most major arterial streets will experience increasing peak-period congestion, including Ala Moana Boulevard, Dillingham Boulevard, Kalākaua Avenue, Kapiʻolani Boulevard, King Street, and Nimitz Highway. Expansion of the roadway system between Kapolei and UH Mānoa is constrained by physical barriers and by dense urban neighborhoods that abut many existing roadways. Given the current and increasing levels of congestion, a need exists to offer an alternative way to travel within the corridor independent of current and projected highway congestion.



### ***Improved Transportation System Reliability***

As roadways become more congested, they become more susceptible to substantial delays caused by incidents, such as traffic accidents or heavy rain. Even a single driver unexpectedly braking can have a ripple effect delaying hundreds of cars. Because of the operating conditions in the study corridor, current travel times are not reliable for either transit or automobile trips. To get to their destination on time, travelers must allow extra time in their schedules to account for the uncertainty of travel time. This is inefficient and results in lost productivity. Because the bus system primarily operates in mixed-traffic, transit users experience the same level of travel time uncertainty as automobile users. A need exists to reduce transit travel times and provide a more reliable transit system.

### ***Accessibility to New Development in 'Ewa/Kapolei/Makakilo as a Way of Supporting Policy to Develop the Area as a Second Urban Center***

The General Plan for the City and County of Honolulu projects the highest population growth rates for the island will occur in the 'Ewa Development Plan area (comprised of the 'Ewa, Kapolei, and Makakilo communities), which is expected to grow by 170 percent between 2000 and 2030. This growth represents nearly 50 percent of the total growth projected for the entire island. The Wai'anae, Wahiawā, North Shore, Windward, Waimānalo, and East Honolulu areas will have population growth of between zero and 16 percent because of this policy, which keeps the country "country." Kapolei, which is developing as a "second city" to Downtown Honolulu, is projected to grow by nearly 600 percent to 81,100 people, the 'Ewa neighborhood by 100 percent, and Makakilo by 125 percent between 2000 and 2030. Accessibility to the overall 'Ewa Development Plan area is currently severely impaired by the congested roadway network, which will only get worse in the future. This area is less likely to develop as planned unless it is accessible to Downtown and other parts of O'ahu; therefore, the 'Ewa, Kapolei, and Makakilo area needs improved accessibility to support its future growth as planned.

### ***Improved Transportation Equity for All Travelers***

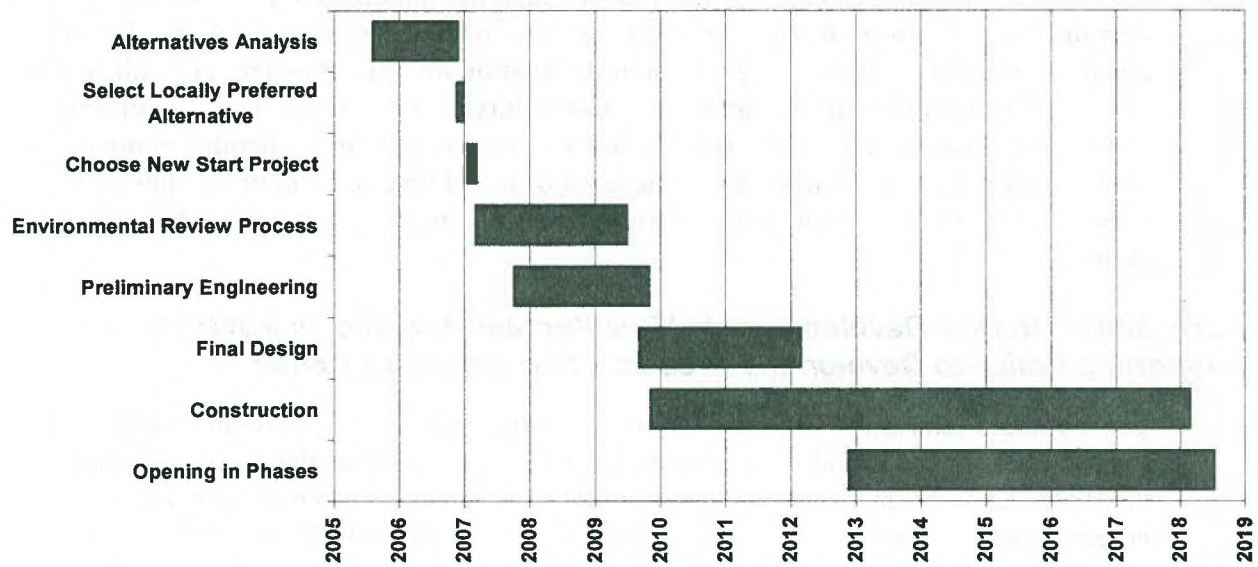
Many lower-income and minority workers live in the corridor outside of the urban core and commute to work in the PUC Development Plan area. Many lower-income workers also rely on transit because of its affordability. In addition, daily parking costs in Downtown Honolulu are among the highest in the United States (Colliers, 2005), further limiting this population's access to Downtown. Improvements to transit capacity and reliability will serve all transportation system users, including low-income and under-represented populations.

## **Project Schedule**

Projects developed through the FTA New Starts process progress through many stages from system planning to operation of the project. The Honolulu High-Capacity Transit Corridor Project is currently in the Alternatives Analysis phase, which includes defining and evaluating specific alternatives to address the purpose of and need for the project as



discussed in this chapter. The anticipated project development schedule for completion of the New Start Project is shown in Figure 1-3.



**Figure 1-3: Project Schedule**

The four alternatives presented in Chapter 1 were developed in order to evaluate them using a number of criteria including environmental, social, and economic effect; design feasibility and effectiveness in achieving purpose and need; and cost. The information developed was presented to the public for review as well as to the Honolulu City Council.

## **Technical Reports and Plans**

As the four alternatives were developed a number of technical reports were produced to aid in the analysis of the alternatives and the selection of the locally-preferred alternative (LPA). Technical reports prepared included:

- Conceptual Design Reports:
  - Alignment Plans and Profiles
  - Conceptual Alternatives Memorandum
  - Detailed Definition of Alternatives
  - Evaluation of Project Delivery Options
  - Station Conceptual Plans
  - Technical Memo on Utility Relocations
  - Technology Options Memo
- Cost and Financing Reports:
  - Capital Costing Memorandum
  - Financial Feasibility Report
  - Funding Options Analysis
  - O & M Costing Memorandum
- Environmental Technical Reports:
  - Air Quality Technical Report
  - Cultural Resources Technical Report
  - Economics Technical Report
  - Energy Technical Report
  - Environmental Baseline Report
  - Environmental Justice/Social Impacts Technical Report
  - Hazardous Materials Technical Report
  - Historic & Archaeological Technical Report
  - Land Use Plans and Policies Technical Report
  - Natural Resources Technical Report
  - Noise and Vibration Technical Report
  - Visual Technical Report



- Water Resources Technical Report
- Transportation Reports:
  - On-board Survey Results Report
  - Transportation Impacts Report
  - Travel Demand Forecasting Results Report
- Summary Reports:
  - Alternatives Evaluation Report
  - Alternatives Screening Memo
  - Environmental Impact Statement Preparation Notice and Notice of Intent
  - Scoping Report

The information collected and summarized in these reports was compiled in the *Alternatives Analysis Report (AA)*.

Table 2-1 provides a comparison of each of the alternatives in relation to the project goals and objectives.

The AA identified the Fixed Guideway Alternative, (Kapolei-Airport-Dillingham-Halekauwila) as the preferred long-term choice in the corridor. The AA, however, acknowledged that this alternative was not financially feasible given currently anticipated funding sources and thus identified a shorter alternative (Fixed Guideway, East Kapolei to Ala Moana Center) as a financially feasible starting point for implementation.



Table 2-1: Effectiveness of Alternatives at Meeting Goals and Objectives in the Year 2030

| Objective  | Evaluation Measure   | Alternative 1        | Alternative 2   | Alternative 3            | Alternative 4: Fixed Guideway |  |
|--|--|----------------------|-----------------|--------------------------|-------------------------------|--|
|  |  | No Build Alternative | TSM Alternative | Managed Lane Alternative | Full-corridor Alignment       | 20-mile Alignment East Kapolei to Ala Moana Center |
| Reduce corridor travel times   | Reduction in transit travel times  | -                    | 9% reduction    | 3% reduction             | 14% reduction                 | 17% reduction                                      |
|  | Total daily transit travel time savings (person hours)   | -                    | 14,000          | 18,000                   | 60,000                        | 49,000   |
|  | Reduction in daily vehicle hours of travel delay   | -                    | 2% reduction    | 1% increase              | 18% reduction                 | 11% reduction                                      |
| Improve corridor travel time reliability   | Miles of alternative's alignment in exclusive right-of-way   | 0                    | 0               | 16 miles                 | 28 miles                      | 20 miles   |
| Provide convenient, attractive and effective transit service within the corridor                                 | Increase in transit mode share   | -                    | 5% increase     | 7% increase              | 26% increase                  | 21% increase                                       |
|  | Total daily transit trips  | 232,100              | 243,100         | 244,400                  | 294,100                       | 281,900  |
|  | Total daily new riders   | -                    | 11,900          | 16,400                   | 60,700                        | 49,000   |
|  | Reduction in daily vehicle trips   | -                    | 10,200          | 14,900                   | 59,600                        | 48,000   |
| Provide transit corridor travel times competitive with auto travel times   | Comparison of transit with auto travel times   | 22% increase         | 12% increase    | 19% increase             | 5% increase                   | 2% increase  |
| Maximize the number of persons within convenient access range of transit   | Employees within one-half mile of stations   | 0                    | 0               | 0                        | 443,800                       | 315,900  |
|  | Population within one-half mile of stations  | 0                    | 0               | 0                        | 364,400                       | 214,400  |
| Encourage transit-oriented development in existing and new growth areas  | Potential for transit-oriented development   | ○                    | ○               | ○                        | ●                             | ●  |
| Integrate transit with designated higher density development areas   | Degree to which the alternative serves existing and planned higher density developments  | ○                    | ○               | ○                        | ●                             | ●  |
| Support economic development of major regional economic centers  | Thousands of residents within 30 minutes travel by transit to Downtown Honolulu  | 215                  | 219             | 218                      | 235                           | 226  |
|  | Thousands of residents within 30 minutes travel by transit to Kapolei  | 67                   | 82              | 99                       | 109                           | 98   |
| Provide solutions with benefits commensurate with their costs  | Incremental annualized cost per user benefit (compared to TSM Alternative)   | N/A                  | N/A             | \$102.64                 | \$22.11                       | \$22.75  |
| Provide solutions that meet the project purpose and need while minimizing total costs                            | Total capital costs (2006 dollars)   | 0                    | 0               | \$2.6 billion            | \$4.6 billion                 | \$3.6 billion                                      |
|  | Annual operation and maintenance costs   | \$192 million        | \$234 million   | \$261 million            | \$256 million                 | \$251 million                                      |
|  | Incremental annualized cost per new rider(compared to TSM)   | N/A                  | N/A             | \$562                    | \$22                          | \$22   |
| Improve transit operating efficiency   | Operating cost per transit passenger mile  | \$0.35               | \$0.40          | \$0.47                   | \$0.33                        | \$0.35   |
| Avoid disproportionate impacts on low income and minority population groups                                      | Full or partial acquisitions to low income and minority communities  | 0                    | 0               | 17                       | 60                            | 54   |
| Provide effective transit options to transit-dependent communities   | Number of transit trips originating from transit-dependent communities   | 56,000               | 57,200          | 58,000                   | 60,300                        | 59,800   |
| The cost of building, operating, and maintaining the alternative is within the range of likely available funding | Degree to which the amount of funding required to build the alternative system is attainable   | ●                    | ●               | ○                        | ●                             | ●  |
|  | Proposed share of total project costs from sources other than New Starts Section 5309 funds  | 100%                 | 100%            | 100%                     | 66%                           | 82%  |
|  | Ability to operate and maintain the transit system after it is built   | ●                    | ●               | ●                        | ●                             | ●  |
| Construction of the alternative is feasible in terms of constructability and ROW availability                    | High rating = standard construction/low degree of risk and known available ROW<br>Low rating = unique or difficult construction/high degree of risk and ROW availability uncertain or doubtful | ●                    | ●               | ●                        | ●                             | ●  |
| Minimize impacts on natural and cultural resources   | Use of land including natural areas and parklands  | 0                    | 0               | 2                        | 3                             | 3  |



| Objective   | Evaluation Measure  | Alternative 1        | Alternative 2   | Alternative 3            | Alternative 4: Fixed Guideway |  |
|---|---|----------------------|-----------------|--------------------------|-------------------------------|--|
|   |   | No Build Alternative | TSM Alternative | Managed Lane Alternative | Full-corridor Alignment       | 20-mile Alignment East Kapolei to Ala Moana Center |
|   | Proximity to historic resources   | 0                    | 0               | 30                       | 82                            | 70   |
| Minimize the effect on homes and businesses           | Number of full or partial acquisitions of residential or commercial parcels | 0                    | 0               | 31                       | 90                            | 79   |
| Minimize disruption to traffic operations             | Degree of physical roadway impacts  | ●                    | ●               | ●                        | ○                             | ●  |
| Minimize conflicts with utilities                     | Degree to which utilities need to be relocated (relocation cost)            | 0                    | 0               | \$220 million            | \$530 million                 | \$460 million                                      |
| Minimize construction impacts                         | Daily vehicle miles traveled impacted by construction of the alternative    | -                    | -               | 670,000                  | 631,000                       | 524,000  |
|   | Impact to access to businesses and residences during construction           | ●                    | ●               | ●                        | ○                             | ●  |
|   | Duration of construction impacts  | -                    | -               | 6 to 8 years             | 8 to 10 years                 | 7 to 9 years                                       |
| Minimize impacts to community and community amenities | Community facilities/resources affected                                     | 0                    | 0               | 0                        | 8                             | 5  |
|   | Impacts to parking  | ○                    | ●               | ●                        | ●                             | ●  |
|   | Number of noise impacts to residences                                       | 0                    | 0               | 260                      | 200                           | 170  |
|   | Visual impacts/view corridors affected                                      | ●                    | ●               | ○                        | ○                             | ○  |
| Reduce energy consumption                             | Reduction in regional transportation-related energy consumption             | N/A                  | ●               | ○                        | ●                             | ●  |
| Achieve consistency with adopted plans                | Degree of consistency with adopted plans                                    | ○                    | ○               | ○                        | ●                             | ●  |

Note: ○ = Lowest benefit or greatest impact, ● = Highest benefit or least impact



## Public Involvement and Agency Coordination

Public involvement is essential to obtain feedback from well-informed community members and government agencies on issues significantly affecting community decisions. Therefore, public participation in the evaluation of the project alternatives and the City Council's selection of a LPA is vital. The public participation process ensures that critical concerns and technical issues are identified early in the study process and that they are addressed in the engineering, environmental, economic and financial analyses. Ultimately, the LPA should effectively respond to community needs and preferences and satisfy local, State, and Federal environmental requirements.

Elements of the project's public involvement included:

- Scoping meetings held prior to alternatives analysis
- Community-based public information meetings
- Publicly-available information
- Community outreach meetings sponsored by the City Council Transportation and Planning Committee
- Special meetings conducted by the City Council

### **Scoping Meetings**

Public scoping meetings were held at two locations within the study corridor. The first scoping meeting was held at Neal S. Blaisdell Center on December 13, 2005 and was attended by approximately 450 people. The second meeting was held at Kapolei Middle School Cafeteria on December 14, 2005 and was attended by approximately 200 people. The meetings were conducted in an open-house format that presented the purpose of and needs for the project, proposed project alternatives, and the scope of analysis to be included in the AA and the draft EIS. The meetings allowed members of the public to ask their individual questions of project staff and provided an opportunity for the public to provide either written testimony or oral testimony, recorded by court reporters.

An agency scoping meeting targeting those Federal, State, and County agencies potentially interested in the project was held at Neal S. Blaisdell Center on December 13, 2005. The meeting was attended by approximately 20 agencies and utility companies.

Comments received during the scoping process resulted in several changes to the alternatives being evaluated, including adding a second Managed Lane Alternative option and presenting the Fixed Guideway Alternative by section to allow for a simpler comparison of various alignment options in different portions of the study corridor. Also, an elevated alignment along Halekauwila Street was added to the range of alternatives being considered. The scoping process is presented in detail in the *Honolulu High-Capacity Transit Corridor Project Scoping Report*.



**Speakers Bureau**

The Honolulu High-Capacity Transit Corridor Project's public outreach program is centered on a grassroots-oriented Speakers Bureau, staffed by technical professionals. This approach was developed considering the "local style", where "talking story" continues to be a socially important means of conveying information. The speakers were formally trained and then briefed on a continuing basis as new information emerged. Between project scoping and completion of the AA, the speakers bureau addressed groups ranging from backyard gatherings and student brown-bags of fewer than ten people, to meetings of senior citizens and community organizations of between 50 and 100 people, and to Chamber of Commerce and professional association meetings with over 200 people. In total, the speakers bureau provided 179 presentations that were attended by an estimated 4,300 individuals.

One goal of the speakers bureau was to raise public awareness and engage the community in advance of the City Council's selection of a LPA. These community briefings provided a better understanding of the varying perspectives of the general population. When appropriate, these perspectives were incorporated into the planning process.

**Informational Meetings**

Eleven informational meetings were conducted at locations throughout O'ahu (Table 2-2). At these meetings, the Mayor, technical staff, and consultants presented updated technical information about the project and the status of the AA. Approximately 670 people attended these meetings. Note takers documented the question and answer session between the public, the Mayor, and the project team.

**Table 2-2: Summary of Islandwide Community Updates**

| Date               | Location                                    | Attendance  |
|--------------------|---|-------------|
| June 24, 2006      | Kapolei Hale                                | Approx. 100 |
| June 26, 2006      | Honolulu Hale – Mission Memorial Auditorium | Approx. 160 |
| June 28, 2006      | Āliamanu Middle School                      | Approx. 90  |
| August 8, 2006     | Mililani High School                        | Approx. 60  |
| August 14, 2006    | Kalani High School                          | Approx. 35  |
| August 28, 2006    | Farrington High School                      | Approx. 50  |
| September 18, 2006 | University of Hawai'i at Mānoa              | Approx. 75  |
| September 18, 2006 | August Ahrens Elementary School             | Approx. 25  |
| September 19, 2006 | Holomua Elementary School                   | Approx. 25  |
| September 20, 2006 | Alvah Scott Elementary School               | Approx. 35  |
| October 24, 2006   | He'eia Elementary School                    | Approx. 15  |

**City & County of Honolulu Neighborhood Boards**

The project team regularly briefed the neighborhood boards within the project corridor between January and November 2006. A representative from the project team regularly attended board meetings to report and comment on the status of the AA and to answer questions from the boards. Project team representatives also regularly attended the



Mililani and Mililani Mauka Neighborhood Boards, which are outside the corridor. These boards and all other neighborhood boards received formal presentations upon request.

## **Publicly-Available Information**

### **Newsletters**

*Honolulu On The Move*, the project bi-monthly newsletter, provided the public with detailed information on project issues and milestones. A total of seven newsletters were published between December 2005 and November 2006. The U.S. Postal Service bulk mail service was the primary distribution vehicle; reaching nearly 20,000 households and businesses islandwide with each issue. More than 7,000 newsletters were distributed via email. Additional distribution points included the Satellite City Halls and the Hawai'i State Libraries on O'ahu.

### **Website: [www.honolulutransit.org](http://www.honolulutransit.org)**

A dedicated project website was created and maintained for the public to access current project information at all times. It also provides an opportunity for users to input their comments or questions. Project informational fliers are available in nine languages spoken by substantial numbers of people on O'ahu. The [www.honolulutransit.org](http://www.honolulutransit.org) web site also has a link to the City & County of Honolulu's existing web site. Other information available on the web site includes:

- Project purpose and need;
- Project overview and schedule;
- Proposed alternatives, alignments and corridor maps;
- Public involvement opportunities and summaries; and
- Recent newsletters, articles and press releases.

### **City Council Deliberations**

On October 30, 2006, the City and County of Honolulu Department of Transportation Services (DTS) provided the Honolulu City Council with the AA that evaluated alternatives that would provide high-capacity transit service on O'ahu. The primary project study area is the travel corridor between Kapolei and the University of Hawai'i at Mānoa (UH Mānoa). The City Council held thirteen meetings where the selection of the transit LPA was discussed. Public comment was sought at each meeting. The meetings are outlined in Table 2-3.



**Table 2-3: Summary of City Council Meetings**

| <b>Date</b>       | <b>Meeting</b>                        | <b>Description</b>   |
|-------------------|---------------------------------------|--|
| November 1, 2006  | City Council                          | Special Meeting on AA  |
| November 2, 2006  | City Council                          | First reading of Bill 79, relating to selection of the LPA                       |
| November 13, 2006 | Transportation and Planning Committee | Community Outreach Meeting at McKinley High School                               |
| November 16, 2006 | Transportation and Planning Committee | Community Outreach Meeting at Kapolei Hale                                       |
| November 17, 2006 | Transportation and Planning Committee | Community Outreach Meeting at Kalākaua Middle School                             |
| November 20, 2006 | Transportation and Planning Committee | Community Outreach Meeting at Windward Community College                         |
| November 21, 2006 | Transportation and Planning Committee | Community Outreach Meeting at Pearl Ridge Elementary School                      |
| November 22, 2006 | Transportation and Planning Committee | Community Outreach Meeting at Mililani District Park                             |
| November 27, 2006 | Transportation and Planning Committee | Community Outreach Meeting at Radford High School                                |
| November 30, 2006 | Transportation and Planning Committee | Transit Advisory Task Force Progress Report                                      |
| December 7, 2006  | City Council                          | Special Meeting, second reading of Bill 79                                       |
| December 14, 2006 | Transportation and Planning Committee | Special Meeting, relating to Bill 79   |
| December 22, 2006 | City Council                          | Special Meeting, third reading of Bill 79, passage of Bill 79, selecting the LPA |

Testimony from these meetings is summarized in Table 2-4. In general, the comments were categorized as being in support of a specific alternative, or being in opposition to the project, with numerous other general comments or questions that did not specifically provide an opinion.

**Table 2-4: Summary of City Council Testimony**

| <b>Total Testimonies</b> | <b>Favoring Fixed Guideway</b> | <b>Favoring Managed Lanes</b> | <b>Favoring Bus Transit</b> | <b>Opposed to Project</b> |
|--------------------------|--------------------------------|-------------------------------|-----------------------------|---------------------------|
| 2,936                    | 2,395                          | 23                            | 13                          | 291                       |

The details of the City Council meeting testimony and correspondence related to the selection of the LPA are presented in detail in the *Draft Summary of City Council Hearings Testimony*.

After review of the AA and other reports prepared for the project plus consideration of public comments detailed in Chapter 1, the City and County of Honolulu Council selected an LPA on December 22, 2006. The LPA was laid out in Bill 79, CD2, which passed in the council by a vote of 7 to 2. The bill was signed into law by the Mayor on January 6, 2007, becoming Ordinance 07-001. The ordinance and its certification are provided in Appendix A.

The City Council generally agreed with the recommendation in the AA. A fixed-guideway transit system extending from Kapolei to UH Mānoa with a connection to Waikīkī was selected as the LPA. The ordinance authorizes the City to proceed to planning and engineering a fixed-guideway project within these limits and following the alignment defined in the ordinance. Also, the first project must be fiscally constrained to anticipated funding sources.

The selected LPA alignment (Figure 3-1) included the following:

- Section I – Saratoga Avenue/North-South Road and Kamokila Boulevard, as determined by the city administration before or during preliminary engineering, to Farrington Highway;
- Section II – Farrington Highway/Kamehameha Highway;
- Section III – Salt Lake Boulevard and Aolele Street as determined by the city administration before or during preliminary engineering;
- Section IV – Dillingham Boulevard; and
- Section V – Nimitz Highway/Halekauwila Street/Kapi‘olani Boulevard to the University of Hawai‘i at Mānoa, with the Waikīkī branch.

The LPA did not designate the transit technology to be used. The council reserved the right to select the technology of the fixed guideway system for the LPA.



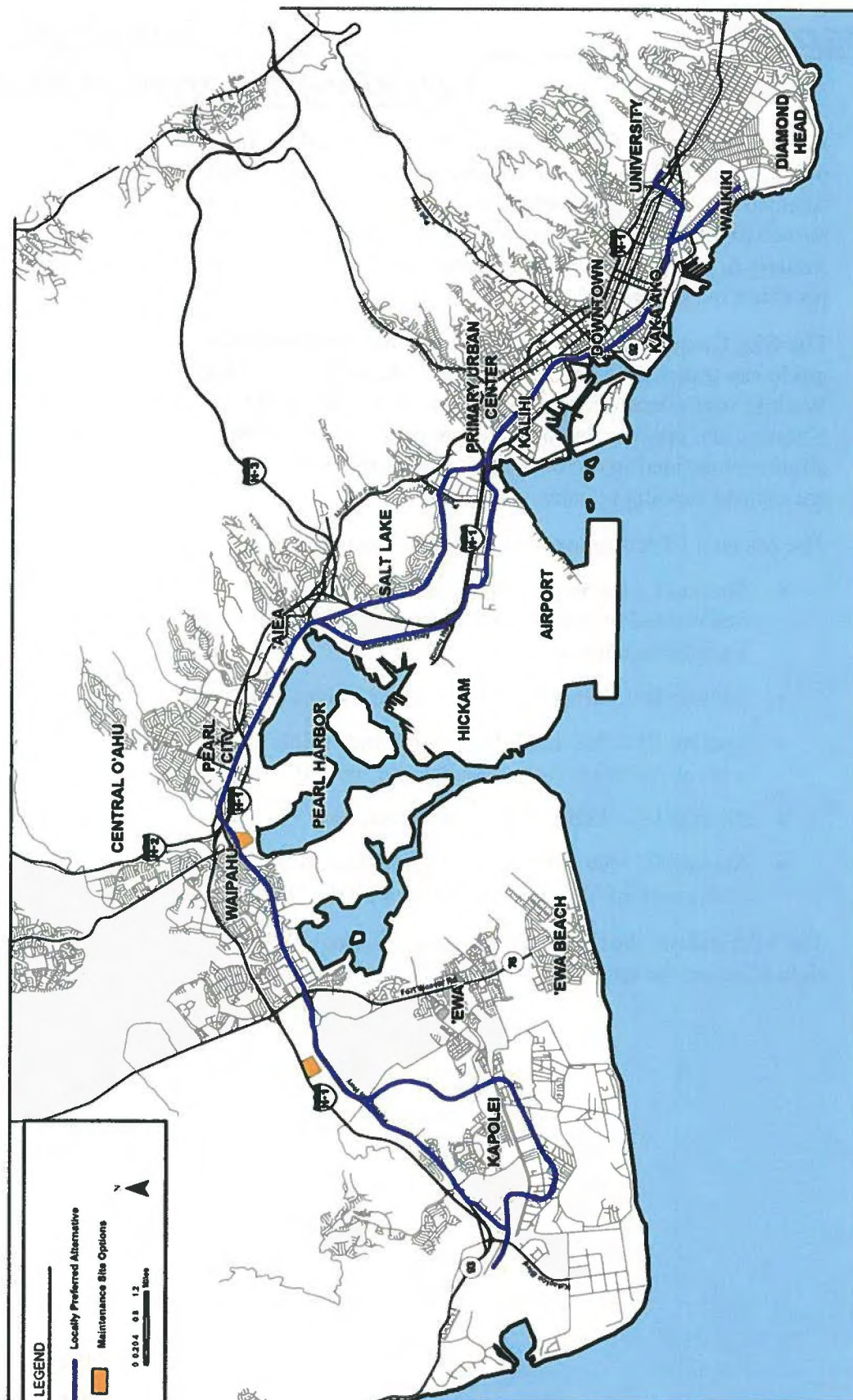


Figure 3-1: Locally-Preferred Alternative

The city administration and City Council looked at several minimum operable segment (MOS) options and determined that two were cost-effective and financially feasible (East Kapolei to Ala Moana Center via Airport and via Salt Lake Boulevard). On February 27, 2007, the City Council adopted Resolution 07-039, FD1 (C). This resolution is provided in Appendix B. The resolution, adopted by a vote of 5 to 4, provides that the MOS use the following alignment:

- Section I – North-South Road to Farrington Highway, starting from UH West Oahu, near the future Kroc Center;
- Section II – Farrington Highway/Kamehameha Highway;
- Section III – Salt Lake Boulevard;
- Section IV – Dillingham Boulevard; and
- Section V – Nimitz Highway/Halekauwila Street/Kona Street to Ala Moana Center.

This MOS will be the New Start Project proposed to FTA for federal funding.



**Description**

The LPA would include the construction and operation of a fixed-guideway transit system between Kapolei and UH Mānoa and Waikīkī. The system could use any of a range of fixed-guideway transit technologies that meet performance requirements and could be either automated or employ drivers.

Station and supporting facility locations also are considered. Supporting facilities include a vehicle maintenance facility, park-and-ride lots, and traction-power substations. The vehicle maintenance facility would either be located between North-South Road and Fort Weaver Road or in the vicinity of Leeward Community College. Some bus service would be reconfigured to bring riders on local buses to nearby fixed-guideway transit stations. To support this system, the bus fleet would be increased.

The fixed guideway system is planned to operate between 4 a.m. and midnight, with a train arriving in each direction at each station between every three and ten minutes. The system is planned to operate with a unified fare structure with TheBus, with transfers and passes usable on both systems. A possible fare-collection system would include one that operates on an honor basis. No gates or fare inspection points would be used in the stations. Fare machines would be available at all stations, and standard fare boxes would be used on buses. Fare inspectors would randomly ride the system and check that passengers have valid tickets or transfers. Violators would be cited and fined.

The system is planned to operate with multicar trains approximately 175 to 200 feet in length, with each train capable of carrying a minimum of 300 passengers. This would provide a peak capacity of at least 6,000 passengers per hour per direction. The system would be expandable to longer trains of up to 300 feet in the future to increase capacity by 50 percent. Also, the system could be operated with shorter headways (time between train arrivals) to increase peak capacity. The following five technologies are under consideration, based on their ability to meet these operating requirements: light rail transit, rapid rail transit, rubber-tired guided vehicles, magnetic levitation, and monorail.

The LPA fixed guideway alignment was defined by the City Administration consistent with Ordinance 07-001. It would generally follow this route: Saratoga Avenue/North-South Road to Farrington Highway/Kamehameha Highway to Salt Lake Boulevard to Dillingham Boulevard to Nimitz Highway/Halekauwila Street/Kona Street/Kapi'olani Boulevard/University Avenue with a branch serving Waikīkī (Figure 5-1). Transit station locations are listed in Table 5-1. Detailed alignment drawings are available in the *Honolulu High-Capacity Transit Corridor Project Alignment Plans and Profiles*. The MOS/New Start Project would begin in the vicinity of the planned University of Hawai'i West O'ahu campus and extend to Ala Moana Center, which is the portion of the alternative that can be constructed with reasonably anticipated funding. The remainder of the alternative would be constructed once additional funding is secured.



**Table 5-1: Transit Station Locations**

| <b>Station Locations for New Start Project</b>           |  |
|--|--|
| UH West O'ahu Makai Station                              |  |
| UH West O'ahu at Farrington Highway Station              |  |
| Farrington Highway Koko Head of North-South Road Station |  |
| Farrington Highway at Leokū Street Station               |  |
| Farrington Highway at Mokuola Street Station             |  |
| Leeward Community College Station                        |  |
| Kamehameha Highway at Kuala Street Station               |  |
| Kamehameha Highway at Kaonohi Street Station             |  |
| Salt Lake Boulevard at Kahuapa'ani Street                |  |
| Salt Lake Boulevard at Ala Nioi Place Station            |  |
| Dillingham Boulevard at Middle Street Station            |  |
| Dillingham Boulevard at Mokauea Street Station           |  |
| Dillingham Boulevard at Kōkea Street Station             |  |
| Ka'aahi Street Station                                   |  |
| Nimitz Highway at Kekaulike Street Station               |  |
| Nimitz Highway at Fort Street Station                    |  |
| Halekauwila Street at South Street Station               |  |
| Halekauwila Street at Ward Street Station                |  |
| Ala Moana Center Station                                 |  |
| <b>Station Locations for Future Extensions</b>           |  |
| <b>Wai'anae of UH West O'ahu Makai Station</b>           |  |
| Kapolei Parkway at Hanua Street                          |  |
| Kapolei Parkway at Wākea Street                          |  |
| Saratoga Avenue at Wākea Street                          |  |
| Saratoga Avenue at Fort Barrette Road                    |  |
| Kapolei Parkway at North-South Road                      |  |
| <b>Koko Head of Ala Moana Center Station</b>             |  |
| Kapi'olani Boulevard at McCully Street                   |  |
| University Avenue at Date Street                         |  |
| University Avenue at S. King Street                      |  |
| UH Mānoa Lower Campus                                    |  |
| Kalākaua Avenue at Convention Center                     |  |
| Kūhiō Avenue at Kālaimoku Street                         |  |
| Kūhiō Avenue at Lili'uokalani Avenue                     |  |



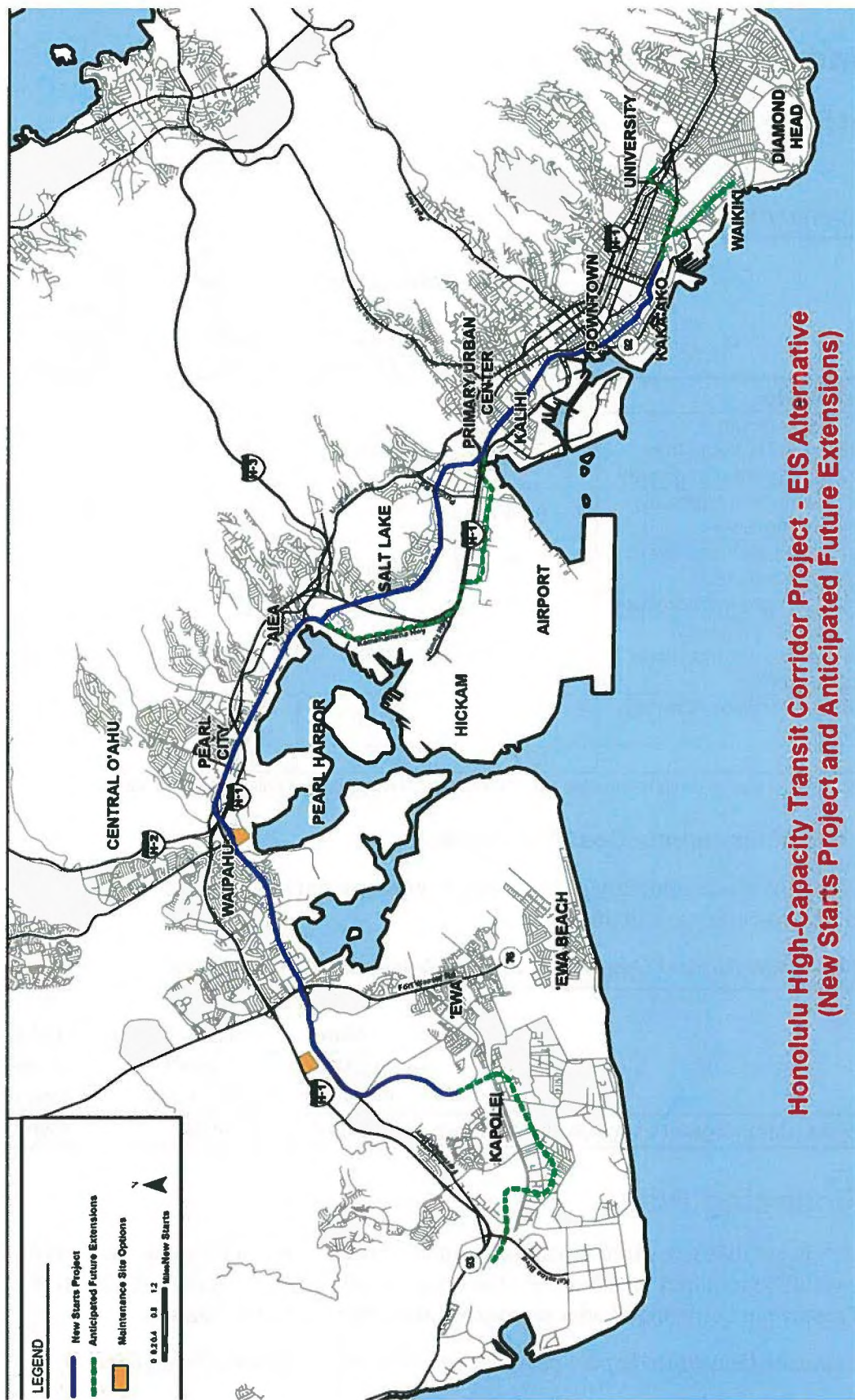


Figure 5-1: New Start Project and Future Extensions



# Capital and Operations Costs

## Capital Cost Estimates

Table 5-2 summarizes the capital cost estimate for the New Start Project.

**Table 5-2: Capital Cost Estimate**

|   | Alignment<br>Length | Construction<br>Costs | Other<br>Project<br>Costs | Total<br>Project<br>Costs |
|---|---------------------|-----------------------|---------------------------|---------------------------|
|   |                     | (2006\$)              | (2006\$)                  | (2006\$)                  |
|   | (miles)             | x1,000,000            | x1,000,000                | x1,000,000                |
| <b>New Start Project</b>  |                     |                       |                           |                           |
| Section I: North-South Road/Farrington Highway from UH-West Oahu (partial at-grade) | 3.65                | \$289                 | \$110                     | \$399                     |
| Section II: Farrington Highway/ Kamehameha Highway                                  | 6.74                | \$717                 | \$277                     | \$994                     |
| Section III: Salt Lake Boulevard (to Dillingham Boulevard)                          | 4.73                | \$421                 | \$166                     | \$587                     |
| Section IV: Dillingham Boulevard  | 1.84                | \$280                 | \$117                     | \$397                     |
| Section V: Nimitz Highway/ Halekauwila Street/ Kona Street to Ala Moana Center      | 2.75                | \$459                 | \$227                     | \$686                     |
| System-wide: Facilities, Controls, and 66 Vehicles                                  | –                   | \$118                 | \$286                     | \$404                     |
| <b>TOTAL</b>  | <b>19.71</b>        | <b>\$2,284</b>        | <b>\$1,183</b>            | <b>\$3,467</b>            |

Notes: Total project costs may not equal the construction costs plus other project costs presented in this table due to rounding methods.

## Operations and Maintenance Cost Estimates

Table 5-3 provides a summary of estimated operations and maintenance costs for the New Start Project in year 2030.

**Table 5-3: Year 2030 Annual Operations and Maintenance Cost Estimate**

|   | Bus            | Fixed<br>Guideway | Total          |
|---|----------------|-------------------|----------------|
|   | (2006\$)       | (2006\$)          | (2006\$)       |
|   | x1,000,000     | x1,000,000        | x1,000,000     |
| <b>New Start Project (East Kapolei to Ala Moana Center)</b> | <b>\$205.4</b> | <b>\$59.3</b>     | <b>\$264.7</b> |

## Project Financing Plan

The LPA is not discussed in this section because it is clear that additional sources of funds would be required to finance it. However, as ordinance 07-001 requires, the New Start Project can be financed with reasonable anticipated funding sources.

The *Financial Feasibility Report* provides details related to project financing.



## **Funding Sources**

The Project is eligible for general excise tax (GET) surcharge revenues and FTA New Starts funds. At the beginning of the project, GET surcharge revenues in excess of project costs would be deposited into a trust or savings account and earn interest based on the prevailing savings rate, assumed to be five percent. Monies from the trust or savings account would be used in later years to pay for construction costs until the account is depleted.

In the peak years of construction, when yearly costs would exceed revenues from the GET and New Starts funds, a limited-duration loan with an interest rate assumed to be six percent would be used. The loan would be paid with GET and New Starts funds as construction costs tailed off and would be paid off by the end of 2022 with the GET surcharge is scheduled to end.

It is assumed that New Starts and any other required source enter the project during years of construction in pro-rata amounts with the construction draw-down schedule.

Table 5-4 show sources and uses of funds for the financing of the New Start Project for the baseline GET surcharge revenue scenario.

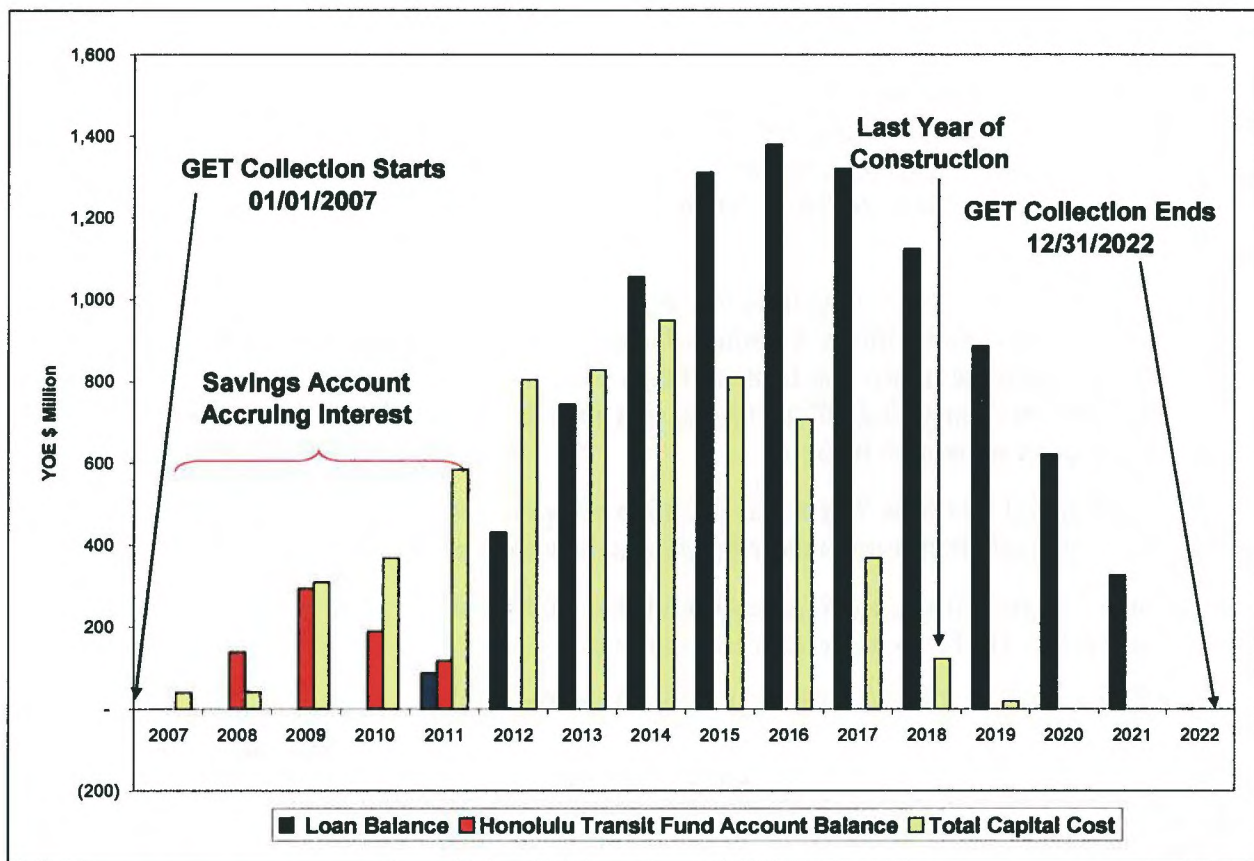
**Table 5-4: Sources and Uses of Funds – New Start Project**

|                                  | <b>Millions of 2006 Dollars</b> | <b>Millions of Year-of-Expenditure Dollars</b> |
|----------------------------------|---------------------------------|--|
| Total Net GET Surcharge Revenues | 3,020                           | 4,055  |
| New Starts Funds                 | 700                             | 925  |
| Total Revenues                   | 3,720                           | 4,980  |
| Fixed Guideway Capital Cost      | 3,470                           | 4,570  |
| Net Interest Costs               | 250                             | 410  |
| Total Cost                       | 3,720                           | 4,980  |

Notes: Amounts may not add up due to rounding.

## **Cash Flows for the New Start Project**

Revenues from the GET surcharge in 2007 and 2008 are greater than project expenditures; this balance is deposited into a savings account. The savings account balance is drawn down during 2009 to 2011. After this period, construction costs are met first by New Starts and the GET surcharge and then by drawing down on the loan facility. Provided New Starts funds of at least \$925 million are obtained (Table 5-4), project debt can be completely paid by 2022, the last authorized year of GET surcharge collection. Figure 5-2 illustrates the financial dynamics showing the balance of the loan facility, savings balance, along with the construction cost drawdown schedule from 2007 to 2022.



**Figure 5-2: Savings Balance, Loan Facility Balance, and Capital Costs for New Start Project**

## Continued Environmental Review Process

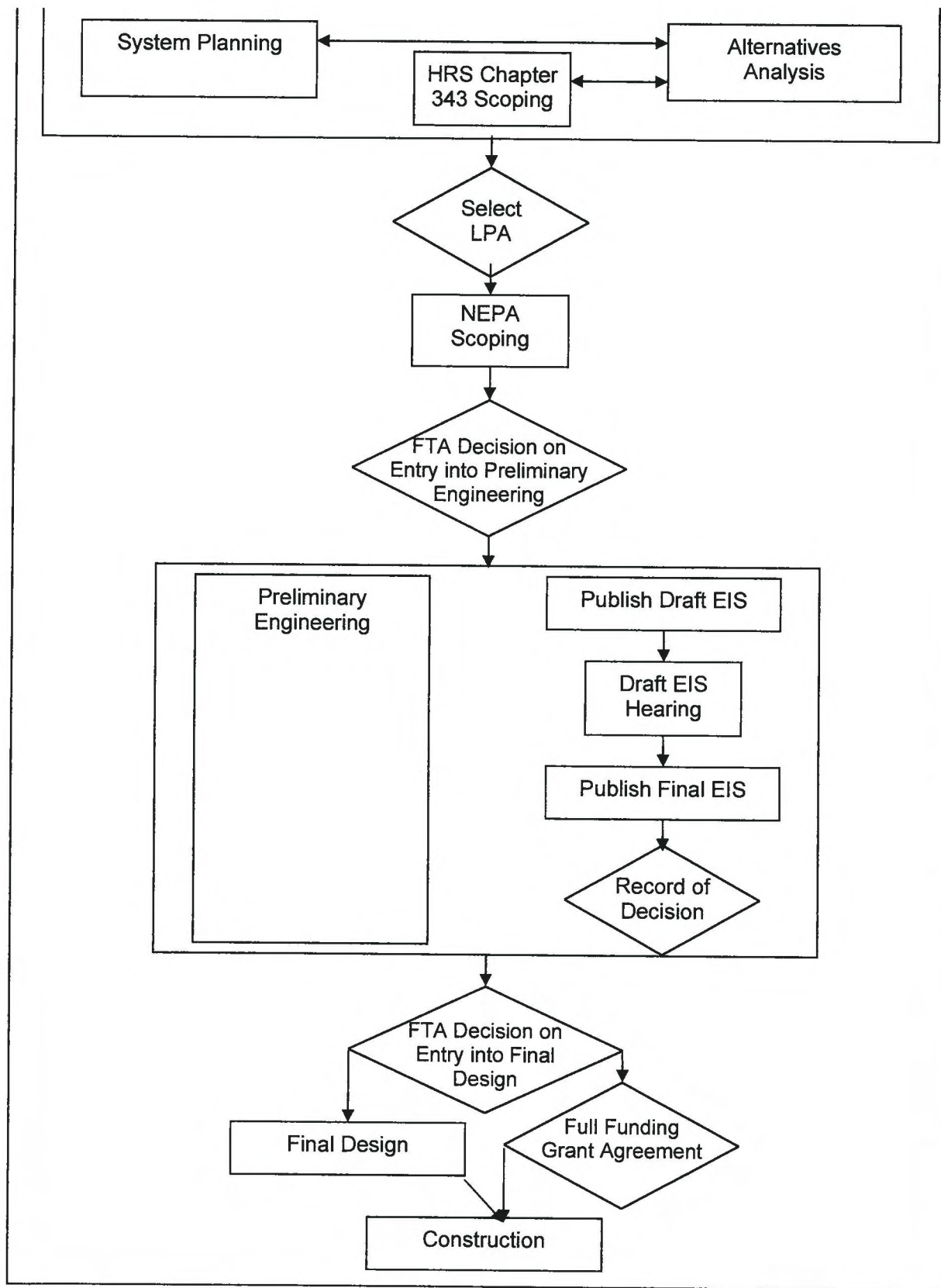
Per the direction established in Ordinance 07-001, DTS is initiating development of an EIS that satisfies the requirements of NEPA and its implementing regulations and Chapter 343 of the Hawai'i Revised Statutes. The EIS preparation will follow the project development process shown in Figure 5-3.

Three alternatives are proposed to be evaluated in the EIS:

1. No Build Alternative
2. Fixed Guideway Transit Alternative via Salt Lake Boulevard
3. Fixed Guideway Transit Alternative serving Airport and Salt Lake

These three alternatives, which incorporate the LPA and New Start Project, will be further developed during the draft EIS analysis. Many aspects of the alternatives will be developed including the physical characteristics and design, operational details, and cost and financing. The projects affects on the environment will also be analyzed and mitigation measures to control or counter negative impacts will be outlined.





**Figure 5-3: Project Development Process**

**Appendix A**  
**Bill 79, CD2/Ordinance 07-001 and Certification**



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# A BILL FOR AN ORDINANCE

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RELATING TO TRANSIT.

BE IT ORDAINED by the People of the City and County of Honolulu:

SECTION 1. The purpose of this ordinance is to select the city's locally preferred alternative to comply with the process that will be followed in implementing Honolulu's mass transit project. The council has received the Alternatives Analysis Report for the Honolulu High-Capacity Transit Corridor Project ("AA"), dated November 1, 2006. The council believes that, in its role as policymakers for the city, a fixed guideway system is the best selection for the long-term needs and demands of our growing island population. Therefore, the council approves a fixed guideway system as the locally preferred alternative, which will allow the city administration to move forward on the locally preferred alternative.

## PART I. Selection of the Locally Preferred Alternative

### SECTION 2. **Selection of the locally preferred alternative.**

The locally preferred alternative for the Honolulu High-Capacity Transit Corridor Project shall be a fixed guideway system between Kapolei and the University of Hawaii at Manoa, starting at or near the intersection of Kapolei Parkway and Kalaeloa Boulevard, with an alignment as follows:

- (1) Section I – Saratoga Avenue/North-South Road and Kamokila Boulevard, as determined by the city administration before or during preliminary engineering, to Farrington Highway;
- (2) Section II – Farrington Highway/Kamehameha Highway;
- (3) Section III – Salt Lake Boulevard and Aolele Street as determined by the city administration before or during preliminary engineering;
- (4) Section IV – Dillingham Boulevard; and
- (5) Section V – Nimitz Highway/Halekauwila Street/Kapiolani Boulevard to the University of Hawaii at Manoa, with the Waikiki branch.

The "sections" refer to the sections in figures 2-3 through 2-7 of the Alternatives Analysis Report.



## A BILL FOR AN ORDINANCE

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SECTION 3. The city administration is authorized to proceed with preparation of an environmental impact statement for the locally preferred alternative (LPA), and with planning and preliminary engineering for that portion of the LPA (including any portion of any section of the LPA listed in section 2 above) that may be constructed within financial constraints (capital cost and any interest to finance that capital cost shall be paid entirely from general excise and use tax surcharge revenues, interest earned on the revenues, and any federal, state, or private revenues); provided that this portion shall constitute a minimum operable segment (MOS) for purposes of Federal New Starts funding eligibility; and provided further that the proposed MOS shall be subject to Council approval by resolution.

SECTION 4. Section 6-60.1, ROH, is amended to read as follows:

**"Sec. 6-60.1 Establishment of surcharge—Conditions.**

Pursuant to Section 2 of Act 247, Session Laws of Hawaii, Regular Session of 2005, codified as Section 46-16.8 of the Hawaii Revised Statutes, there is hereby established a one-half percent general excise and use tax surcharge to be used for purposes of funding the operating and capital costs of public transportation within the City and County of Honolulu as specified herein. The excise and use tax surcharge shall be levied beginning January 1, 2007. Prior to the tax surcharge monies being expended as the local match for federal funds, the following shall occur:

- (1) The council has approved by [resolution] ordinance a locally preferred alternative following an Alternatives Analysis [and Draft EIS]; and
- (2) The council has received from the director of transportation services an operational, financial, development and route plan for the locally preferred alternative; and
- (3) There is a commitment of federal funds, whether for planning, land acquisition or construction, to further the locally preferred alternative."

PART II. Alignment, Stations, and Base Yard  
of the Locally Preferred Alternative

SECTION 5. Section 4-8.3, Revised Ordinances of Honolulu 1990, is amended to read as follows:



## A BILL FOR AN ORDINANCE

### **"Sec. 4-8.3 Types of public infrastructure to be shown on public infrastructure map.**

- (a) Symbols for the following types of public improvement projects shall be shown on the public infrastructure maps, provided they meet the applicability criteria specified in Section 4-8.4:
- (1) Corporation yard;
  - (2) Desalination plant;
  - (3) Drainageway (open channel);
  - (4) Energy generation facility;
  - (5) Fire station;
  - (6) Government building;
  - (7) Golf course (municipal);
  - (8) Electrical transmission line and substation (above 46kV but less than 138kV);
  - (9) Park;
  - (10) Police station;
  - (11) Parking facility;
  - (12) Water reservoir;
  - (13) Sewage treatment plant;
  - (14) Solid waste facility;
  - (15) [Transit corridor;] Fixed guideway system alignment, stations, and base yard of the locally preferred alternative;
  - (16) Major collector or arterial roadway;

## A BILL FOR AN ORDINANCE

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- (17) Sewage pump station; and
- (18) Potable water well.
- (b) The alignment of linear facilities, and the location of project boundaries, shall be considered approximate and conceptual."

### PART III. Technology of the Locally Preferred Alternative

#### SECTION 6. **Reservation of right to select technology.**

The council reserves the right to select the technology of the fixed guideway system for the locally preferred alternative. If the council exercises the right, the council shall select the technology through subsequent ordinance passed on third reading by the council before the city administration issues a public notice soliciting proposals or inviting bids for work that includes design of the system.

The city administration shall give the council at least 90 days' notice before issuing the first public notice soliciting proposals or inviting bids for work that includes design of the fixed guideway system.

### PART IV. Specifications of Request for Proposals Or Invitation for Bids

#### SECTION 7. **Approval of specifications of requests for proposals or invitation for bids.**

The city administration shall submit to the council the specifications in each proposed request for proposals or invitation for bids for work that includes the planning, design, or construction of any portion of the locally preferred alternative before issuing the request or invitation. The city administration shall not issue the request for proposals or invitation for bids until after the specifications are approved by the council.

### PART V. General

SECTION 8. Ordinance material to be repealed is bracketed; new material is underscored. When revising, compiling or printing this ordinance for inclusion in the Revised Ordinances of Honolulu, the revisor of ordinances need not include the brackets, bracketed material, or the underscoring.





A BILL FOR AN ORDINANCE

SECTION 9. This ordinance shall take effect upon its approval.

INTRODUCED BY:

Donovan Dela Cruz

Ann Kobayashi

Romy M. Cachola

Charles Dlou

Barbara Marshall

Todd Apo

DATE OF INTRODUCTION:

October 19, 2006

Honolulu, Hawaii

Councilmembers

APPROVED AS TO FORM AND LEGALITY:

Deputy Corporation Counsel

APPROVED this 6th day of JANUARY, 2007

Mufi Hannemann

MUFI HANNEMANN, Mayor  
City and County of Honolulu

Introduced: 10/19/06 By: DONOVAN DELA CRUZ

Committee: TRANSPORTATION &amp; PLANNING

Title: A BILL FOR AN ORDINANCE RELATING TO TRANSIT.

Links: [BILL 79 \(2006\)](#)  
[BILL 79 \(2006\), CD1](#)  
[BILL 79 \(2006\), CD2](#)  
[BILL 79 \(1006\), CD2, FD2 \(FINAL #2\)](#)  
[CR-469](#)  
[CR-508](#)

|                             |             |  |             |        |        |  |
|-----------------------------|-------------|--|-------------|--------|--------|--|
| COUNCIL                     | 10/25/06    | BILL PASSED FIRST READING AND REFERRED TO COMMITTEE TRANSPORTATION AND PLANNING.   |             |        |        |  |
|                             | APO Y       | CACHOLA Y  | DELA CRUZ Y | DJOU Y | GARCIA |  |
|                             | KOBAYASHI Y | MARSHALL Y   | OKINO Y     | TAM Y  |        |  |
| TRANSPORTATION AND PLANNING | 11/02/06    | CR-469 - BILL REPORTED OUT OF COMMITTEE FOR PASSAGE ON SECOND READING AND SCHEDULING OF A PUBLIC HEARING AS AMENDED IN CD1 FOR COMMUNITY OUTREACH MEETINGS TO REVIEW THE ALTERNATIVE ANALYSIS (AA) REPORT ON THE HONOLULU HIGH CAPACITY TRANSIT PROJECT (VARIOUS LOCATIONS): 11/13/06; 11/16/06; 11/17/06; 11/20/06; 11/21/06; 11/22/06; 11/27/06                              |             |        |        |  |
| PUBLISH                     | 11/27/06    | PUBLIC HEARING NOTICE PUBLISHED IN THE HONOLULU STAR-BULLETIN.   |             |        |        |  |
| COUNCIL/PUBLIC HEARING      | 12/7/06     | BILL PASSED SECOND READING, AS AMENDED (CD1), CR-469 ADOPTED, PUBLIC HEARING CLOSED AND REFERRED TO TRANSPORTATION AND PLANNING COMMITTEE. (BILL 79, CD1)<br>(NOTE: MOTION TO AMEND FOLLOWING BILLS FAILED: (1) BILL 79, PROPOSED CD1, FD1 (VERSION A); AND (2) BILL 79, PROPOSED CD1, FD1 (VERSION B).  |             |        |        |  |
|                             | APO Y       | CACHOLA Y  | DELA CRUZ Y | DJOU N | GARCIA |  |
|                             | KOBAYASHI Y | MARSHALL N   | OKINO Y     | TAM Y  |        |  |
| TASK FORCE                  | 12/8/06     | BRIEFING BY THE TRANSIT ADVISORY TASK FORCE ON THE COUNCIL'S 12/7/06 PUBLIC HEARING RE BILL 79, CD1.   |             |        |        |  |
| PUBLISH                     | 12/13/06    | SECOND READING NOTICE PUBLISHED IN THE HONOLULU STAR-BULLETIN.   |             |        |        |  |
| TRANSPORTATION AND PLANNING | 12/14/06    | CR-508 - BILL REPORTED OUT OF COMMITTEE FOR PASSAGE ON THIRD READING AS AMENDED IN CD2 FORM.   |             |        |        |  |
| COUNCIL                     | 12/22/06    | CR-508 ADOPTED. BILL 79, CD2, FURTHER AMENDED ON THE COUNCIL FLOOR TO CD2, FD1, HOWEVER, BILL 79, CD2, FD1, FURTHER AMENDED TO BILL 79, CD2, FD2 (FINAL #2), AND SUBSEQUENTLY PASSED THIRD READING, AS AMENDED (BILL 79, CD2, FD2 (FINAL #2))<br>(NOTE: BILL 79 (2006), PROPOSED CD2, FD1 (NORTH-SOUTH BRANCH, NON-COMMITMENT) WAS ALSO CONSIDERED AND SUBSEQUENTLY WITHDRAWN) |             |        |        |  |
|                             | APO Y       | CACHOLA Y  | DELA CRUZ Y | DJOU N | GARCIA |  |
|                             | KOBAYASHI Y | MARSHALL N   | OKINO Y     | TAM Y  |        |  |



# **Appendix B**

## **Resolution 07-039, FD1 (C)**

# RESOLUTION

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## APPROVING THE MINIMUM OPERABLE SEGMENT (MOS) FOR THE HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT.

WHEREAS, the council selected a fixed guideway system as the Locally Preferred Alternative ("LPA") for the Honolulu High-Capacity Transit Corridor Project through the approval of Ordinance 07-001; and

WHEREAS, the council determined that the selected LPA best meets the long-term needs and demands of Oahu; and

WHEREAS, the LPA is defined in Ordinance 07-001 as a fixed guideway system between Kapolei and the University of Hawaii at Manoa, starting at or near the intersection of Kapolei Parkway and Kalaeloa Boulevard, with an alignment as follows:

- (1) Section I — Saratoga Avenue/North-South Road and Kamokila Boulevard, as determined by the city administration before or during preliminary engineering, to Farrington Highway;
- (2) Section II — Farrington Highway/Kamehameha Highway;
- (3) Section III — Salt Lake Boulevard and Aolele Street as determined by the city administration before or during preliminary engineering;
- (4) Section IV — Dillingham Boulevard; and
- (5) Section V — Nimitz Highway/Halekauwila Street/Kapiolani Boulevard to the University of Hawaii at Manoa, with the Waikiki branch;

and

WHEREAS, the council recognizes that a fixed guideway system covering the entire LPA alignment is the long-term goal and that a shorter system should be built first within the revenues available from the General Excise and Use Tax ("GET") surcharge, and funds reasonably expected from the federal government and other state and private sources; and

WHEREAS, such a shorter system is known as a minimum operable segment or MOS by the federal guidelines; now, therefore,



# RESOLUTION

BE IT RESOLVED by the Council of the City and County of Honolulu that it approves as the best minimum operable segment for the Honolulu High-Capacity Transit Corridor Project the portion of the Locally Preferred Alternative between the University of Hawaii-West Oahu, near the future Kroc Center, and Ala Moana Center, via Farrington Highway and Kamehameha Highway, to Salt Lake Boulevard, to Dillingham Boulevard, to Nimitz Highway, to Halekauwila Street, and to Ala Moana Center; and

BE IT FURTHER RESOLVED that necessary planning and preliminary engineering for the MOS shall commence; and

BE IT FURTHER RESOLVED that the council urges the city administration to keep the council informed of the progress of the project on a periodic basis; and

BE IT FINALLY RESOLVED that copies of this Resolution be transmitted to the mayor, the managing director, and the director of the department of transportation services.

INTRODUCED BY:

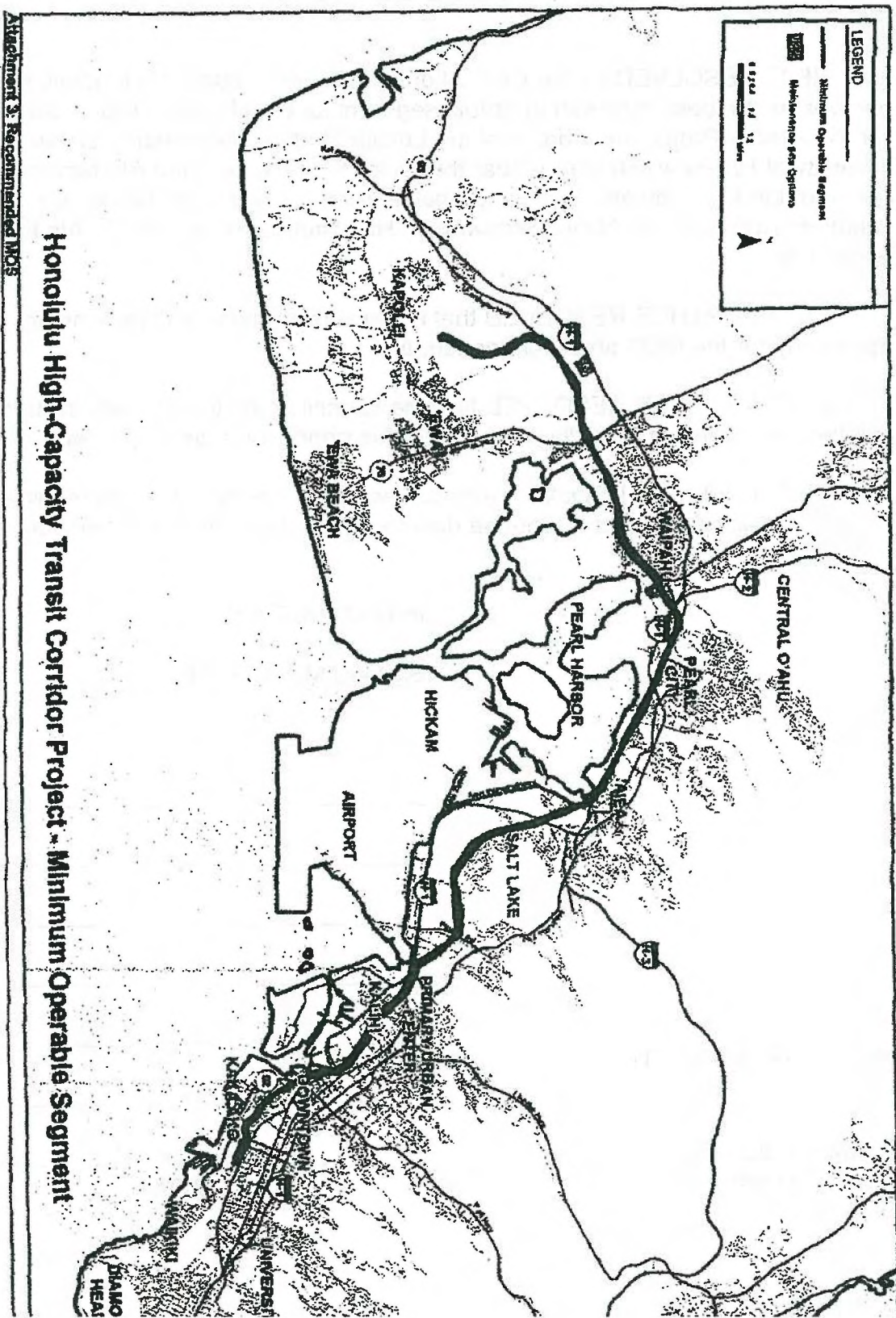
Barbara Marshall (BR)

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DATE OF INTRODUCTION:

January 30, 2007  
Honolulu, Hawaii

\_\_\_\_\_  
Councilmembers



Attachment 3: Recommended MOS  
 Alternative Operable Segment (MOS) Option  
 Honolulu High-Capacity Transit Corridor



HONOLULU, HAWAII  
CERTIFICATE

**RESOLUTION 07-039, FD1 (C)**

Introduced: 01/30/07 By: BARBARA MARSHALL (BY REQUEST) Committee: TRANSPORTATION/BUDGET  
(JOINT COMMITTEE)

Title: RESOLUTION APPROVING THE MINIMUM OPERABLE SEGMENT (MOS) FOR THE HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR PROJECT.

Links: RES07-039  
RES07-039, FD1 (C)  
CR-65

|                                     |             |   |
|-------------------------------------|-------------|---|
|                                     |             | CC-024 NESTOR GARCIA – REFERRAL FROM TRANSPORTATION TO JOINT TRANSPORTATION/BUDGET COMMITTEE.   |
| JOINT<br>TRANSPORTATION<br>& BUDGET | 02/13/07    | CR-65 – RESOLUTION REPORTED OUT OF JOINT TRANSPORTATION AND BUDGET COMMITTEE FOR ADOPTION.  |
| COUNCIL                             | 02/21/07    | CR-65 NOT ADOPTED. RESOLUTION AMENDED TO RESOLUTION 07-039, FD1 (C) ON THE COUNCIL FLOOR (AYES: APO, GARCIA, CACHOLA, OKINO, TAM. – 5. NOES: DELA CRUZ, DJOU, KOBAYASHI, MARSHALL. – 4); WAIVER OF THE 48-HOUR COUNCIL RULE FAILED; CR-65 AND RESOLUTION TO BE CONSIDERED AT SPECIAL COUNCIL MEETING ON 2/27/07 AT 12 P.M.<br><br>NOTE: RESOLUTION 07-039 FAILED TO BE AMENDED BY FD1(A) (AYES: DJOU, DELA CRUZ, KOBAYASHI. – 3; NOES: APO, CACHOLA, GARCIA, OKINO, TAM, MARSHALL. – 6) AND FD1 (B) (AYES: CACHOLA, DELA CRUZ, KOBAYASHI. – 3; NOES: APO, DJOU, GARCIA, OKINO, TAM, MARSHALL. – 6). |
| COUNCIL                             | 02/27/07    | CR-65 AND RESOLUTION 07-039, FD1 (C) ADOPTED.   |
|                                     | APO Y       | CACHOLA Y DELA CRUZ N DJOU N GARCIA Y   |
|                                     | KOBAYASHI N | MARSHALL N OKINO Y TAM Y  |
|                                     |             | MOTION TO AMEND RESOLUTION 07-039 FD1 (C) TO <u>FD2 (B)</u> [HAND-CARRIED] FAILED. (AYES: DELA CRUZ, DJOU, KOBAYASHI- 3; NOES: APO, CACHOLA, GARCIA, OKINO, TAM, MARSHALL – 6.)   |
|                                     |             | MOTION TO AMEND RESOLUTION 07-039 FD1 (C) TO <u>FD2 (C)</u> [HAND-CARRIED] FAILED. (AYES: APO, DJOU, GARCIA, TAM – 4; NOES: CACHOLA, DELA CRUZ, KOBAYASHI, OKINO, MARSHALL – 5.)  |
|                                     |             | [THERE WAS NO MOTION TO CONSIDER RESOLUTION 07-039, PROPOSED FD2 AND RESOLUTION 07-039, PROPOSED FD2 (A) LISTED ON THE AGENDA]  |

Whereby certify that the above is a true record of action by the Council of the City and County of Honolulu on this RESOLUTION.

ENISE C. DE COSTA, CITY CLERK

BARBARA MARSHALL, CHAIR AND PRESIDING OFFICER

AR00064543